Summary of Testimony of
Chairman James J. Hoecker
Federal Energy Regulatory Commission
before the
Subcommittee on Energy and Power
Committee on Commerce
United States House of Representatives

April 22, 1999

Competition is growing in wholesale power markets, in response to the Energy Policy Act of 1992 and the Federal Energy Regulatory Commission's efforts to remove barriers to competition and to let markets -- not regulators -- determine the price of wholesale power. This competition reduces prices for end users even without retail choice by lowering the cost of power purchased for them by utility suppliers.

Still, significant impediments to full competition in wholesale markets remain. First, important gaps remain in the availability of open access transmission service nationwide, and these gaps prevent customers from realizing the full benefits of wholesale competition. Second, bulk power markets operate regionally and should be governed to foster competition and efficiency by increasing the trading opportunities of many participants. However, regulation and the management of transmission systems are not regional in perspective and such benefits may be lost. Third, the reliability of electric service, so vital to our Nation's economy, may be threatened by the difficulties of assigning responsibility for transmission system reliability in a dynamic environment where participants have competing or conflicting commercial interests in how the grid is administered.

To fully realize the competitive goals set by Congress in the Energy Policy Act of 1992 and promoted by the Commission since then, Federal legislation is needed to: bring all transmission facilities in the lower 48 states within the Commission's open access transmission rules; clarify the Commission's authority to promote regional management of the transmission grid through regional transmission organizations; and, establish a fair and effective program to protect bulk power reliability.

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Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before you today to discuss key aspects of the current restructuring of the Nation's electric power industry, namely reliability and transmission issues. Thank you for this opportunity.

The Federal Energy Regulatory Commission (Commission or FERC) is fully engaged in the critical task of promoting competition in the wholesale or "bulk power" market, consistent with the goals of the Energy Policy Act of 1992. To achieve these goals, the Commission's fundamental regulatory policies are to substitute competition for price regulation in wholesale power markets to the extent possible, and to regulate essential transmission facilities so as to enable competition in power markets. Today I will address the progress the Commission and the industry have made in creating an efficient, reliable, fair, and transparent wholesale market, and identify the important ways

in which the Congress can further assist the Commission in completion of this important task.

My testimony will focus on three key issues for advancing robust competition -- open access to all transmission facilities, efficient regional operation of transmission facilities, and mandatory reliability standards. First, there remain important gaps in the availability of open access transmission service nationwide, which, if left unaddressed, will impede the development of competition and prevent wholesale customers from realizing the full benefits of competition. Second, bulk power markets operate regionally and should be governed to foster competition and efficiency by increasing the trading opportunities of many participants. However, management of transmission systems is not regional in most cases, and thus the benefits of full competition may be lost. Third, the reliability of electric service, so vital to our Nation's economy, may be threatened by the difficulties of assigning responsibility for transmission system reliability in a dynamic environment where participants have competing or conflicting commercial interests in how the grid is administered. The Commission is increasingly asked to exercise its existing, but inadequate, statutory authority to ensure compliance with industry standards. To fully realize the competitive goals set by Congress in the Energy

Policy Act of 1992 and promoted by the Commission since then, additional legislation in these areas is needed.

The Status of Open Access Transmission

The Commission works to ensure a well-functioning bulk power market. It oversees sales of electricity by "public utilities" to other utilities -- that is, wholesale transactions. "Public utilities" mainly include investor-owned utilities and exclude the federal power marketing administrations, municipal utilities, and most rural electric cooperatives. Moreover, the Commission does not regulate sales to consumers or electric local distribution services. Those retail services are generally regulated by the states. The electricity prices paid by retail consumers nevertheless include the cost of any power purchased by their utility suppliers in wholesale markets. So, competition in bulk power markets ultimately benefits consumers by reducing the cost of power supplied to them, whether or not a state chooses to allow retail competition.

The Commission's pro-competitive approach tracks what is occurring in the industry itself. Once characterized universally as heavily regulated, vertically-integrated monopolies, public utilities have been increasingly subject to the forces of competition over the past two decades ago, due to various

economic, legislative, and technological developments. Congress gave competition a strong boost in the Energy Policy Act of 1992, increasing the Commission's authority under section 211 of the Federal Power Act to order transmission service in appropriate circumstances.

The Commission fostered the development of competition by adopting light-handed regulation for power suppliers shown to lack market power. Specifically, the Commission began allowing such power suppliers to sell at market rates instead of rates determined by the Commission based on the cost of service. To date, the Commission has authorized market-based rates for literally hundreds of power suppliers, including power marketers and traditional investor-owned utilities.

Understandably, competition in bulk power markets will never be vibrant unless wholesale sellers are able to deliver power to any buyers in the market. Access to buyers is key. In the electric industry, transmission facilities make this possible. These facilities form an interstate grid for delivering power, in the same way the interstate highway system allows trucks to deliver other commodities. There are important differences, however. Electricity cannot be stored. It is delivered instantaneously over an integrated network of wires and a transaction between two parties can affect the capacity of the

system and the transactions of others. Most importantly, the electrical grid is owned by individual utilities and, absent regulation, these utilities can effectively prevent the use of these facilities by their competitors.

Several years ago, the Commission recognized that competition in wholesale markets was being inhibited by the lack of non-discriminatory access to transmission facilities. Sellers owning transmission facilities were stifling competition by discriminating against others seeking to use their transmission facilities, either by denying or delaying transmission service or by imposing discriminatory rates, terms and conditions for service.

Consequently, the Commission in 1996, through a major rulemaking called Order No. 888, ordered open (non-discriminatory) access to the transmission facilities of public utilities. Order No. 888 is an exercise of the Commission's duty under sections 205 and 206 of the Federal Power Act to ensure non-discriminatory transmission services.

Since I last testified before this Subcommittee in October 1997, the pace of change among utility companies has continued to accelerate. The Commission has reviewed and acted upon 18 major utility mergers. Fully ten percent of the Nation's electric

generation plants have been divested by traditional electric utilities. Electric utilities and gas pipeline or distribution companies have combined to form major energy concerns. The number of power marketers and independent generation facility developers entering the marketplace has continued to rise, placing additional competitive pressure on traditional utilities. Five independent system operators (ISOs), three of which are currently operational, have been established to operate entire regions of the transmission system. Three state legislatures now require their utilities to join a regional transmission entity. Trade in bulk power markets has continued to increase significantly and the Nation's transmission grid is being used more heavily and in new ways. Finally, 18 state legislatures have enacted legislation to initiate, or set a date for, retail electricity competition. In other words, the industry is changing to meet the strategic and economic challenges of the competitive marketplace.

Yet, despite the successes of Order No. 888 in fostering competition, not all potential market problems have been addressed. The remaining impediments to full competition fall largely into two categories. First are the engineering and economic inefficiencies inherent in the current operation and expansion of the transmission grid, inefficiencies that are hindering fully competitive power markets and imposing

unnecessary costs on electric consumers. Changes in trade patterns and industry structure have made it more difficult to maintain reliable grid operations, manage transmission congestion, and plan for expansion of transmission facilities. Without further reform, traditional pricing and transmission practices will likely hinder the further development of competitive and efficient bulk power markets. Among these impediments are the "pancaking" of transmission access charges from one system to the next, the absence of clear and tradeable transmission property rights, and the virtual absence of a secondary market in transmission service.

The second category of impediments consists of continuing opportunities for transmission owners to unduly discriminate in the operation of their transmission systems so as to favor their own or their affiliates' power marketing activities. As profit-maximizers, utilities that control monopoly transmission facilities and also have power marketing interests have every incentive to deny equal quality transmission service to competitors. Order No. 888 addressed many forms of undue discrimination by requiring public utilities to separate transmission and power marketing functions, to take transmission service under the same tariff as available to other transmission customers, and to abide by standards of conduct that prohibit the

preferential treatment or sharing of information between the utility's transmission and power marketing functions.

In the wake of Order No. 888, however, many market participants continue to allege, and the Commission has in some cases confirmed, that transmission service problems related to discriminatory conduct remain. Allegations relate to standards of conduct violations and manipulations of the operation of transmission systems to frustrate power marketing competitors, for example by the imposition of transmission curtailments on congested lines. As might be expected in maturing commodity markets, there is a great deal of mistrust among market participants with respect to the fairness of the system. The pace and scope of restructuring and the future of certain companies therefore remain uncertain. Nothing is more detrimental to shareholder values than uncertainty.

These issues represent a challenge to the industry and to the Commission. Although the Commission is committed to full competition in wholesale markets and will pursue that goal through all reasonable means, Congressional action may prove critical to our ability to reach that goal.

Gaps in Open Access

Order No. 888's mandate for open access transmission has key omissions. The Commission's authority does not apply to Federal power marketing administrations, municipal utilities, and most rural electric cooperatives. While the Commission has authority to require these entities ("non-public utilities") to provide transmission service based on a case-specific application under section 211 of the Federal Power Act, it lacks authority to generically order all of them to offer service under open access transmission tariffs.

Approximately one-third of the Nation's integrated transmission grid is beyond the reach of Order No. 888's open access requirements. For example, because the Federal power marketing administrations that own transmission (such as the Bonneville Power Administration and the Western Area Power Administration) and the Tennessee Valley Authority are not public utilities, their transmission systems are beyond the Commission's authority to require open access. Similarly, many municipal utilities and cooperatives control transmission but need not comply with our open access rules. In fact, approximately 70,000 circuit miles of interstate transmission -- over 30 percent of all interstate transmission -- are not subject to the Commission's open access authority. An additional 7,000 miles of intrastate transmission within the Electric Reliability Council of Texas (ERCOT) is beyond our open access authority.

Non-public utilities are nevertheless encouraged to offer open access transmission service under the concept of "reciprocity." In other words, when these utilities take transmission service under a public utility's open access tariff, they must also offer reciprocal service to the public utility, unless the public utility or the Commission waives this requirement. Several non-public utilities have begun offering open access service under a FERC-filed tariff. However, many transmission-owning non-public utilities still do not offer open access service.

Efficient markets in network industries generally require that all service providers be subject to the same rules. This gap in the availability of open access service on the interstate grid raises serious questions about how competitive and efficient the interstate power marketplace can become. Gaps in open access to the grid can cause customers to pay more than they should for power. There is little more that the Commission can legitimately do to address this problem under existing law.

Only a change in the Federal law can effectively address this difficult gap in the availability of open access transmission. Such legislation need not unnecessarily intrude into the activities of these entities. In fact, the experience of those non-public utilities that have voluntarily adopted open

access tariffs demonstrates that open access service consistent with the Commission's requirements is as workable for non-public utilities as for public utilities, although appropriate legislation is needed to address related tax consequences. However, the benefits of competitive access will be delayed until transmission access is universal. The Administration's proposed legislation addresses these issues, by extending Federal Power Act jurisdiction over the rates, terms and conditions for transmission services provided by non-public utilities that own, operate, or control transmission facilities under the same terms that apply to public utilities.

Regional Transmission Organizations

The wholesale electric business is changing rapidly from many smaller local markets to fewer, larger regional markets that usually span multiple states. Power sales in these large markets involve use of all the high-voltage power lines in a region. I believe it is essential, for reliability as well as for commercial reasons, that all of the transmission lines in a region be under the operational control of a single operator that has no financial interest in the more lucrative generation market. I call them Regional Transmission Organizations (RTOs). RTOs can include ISOs of the transmission system as well as

independent transmission companies (transcos) that own and operate the system.

Grid regionalization is not a new concept. Bulk power reliability has been maintained for almost 40 years by voluntary regional industry councils. The Commission encouraged Regional Transmission Groups (RTGs) in the early 1990s to engage in regional planning. Order No. 888 encouraged, but did not require, the formation of ISOs. However, the increasing need for such regional organizations is evidenced by the fact that, without a regulatory or statutory mandate, the industry has already proposed or implemented RTOs in California, the mid-Atlantic states, New England, New York, and the Midwest.

If properly constituted and truly independent, RTOs will be a major step in addressing obstacles to competition and obtaining major efficiencies. First, RTOs will ensure that vertically-integrated transmission-owning utilities do not discriminate in favor of their own generation over another seller's generation. Second, RTOs can be structured to eliminate pancaking of transmission rates that raises the cost of moving power across multiple utility systems. Third, RTOs that have the proper tools can better manage transmission congestion, reduce the instances when power flows on transmission lines must be decreased to prevent overloads, and effectively solve short-term reliability

problems. Fourth, RTOs can facilitate transmission planning across a multistate region and, by operating the grid as efficiently as possible, may give confidence to state siting authorities that new transmission facilities are proposed only when truly needed. Significantly, the Commission also will be more inclined to defer to the planning, pricing and control area decisions of an RTO if it fairly represents the interests of all stakeholders through open membership and fair governance procedures.

To achieve these benefits, the development of RTOs must focus on three criteria. First, RTOs must have real control of the grid, to ensure that use of the grid is efficient and non-discriminatory. Second, RTOs need to be independent of the commercial interests of market participants, so that decisions are accepted by all stakeholders as non-discriminatory and fair. Finally, RTOs need to include a large area, to allow a truly regional market to develop to the full extent desired by market participants. When RTOs meet these criteria, consumers will begin benefitting from the greater competition in broader, more vibrant wholesale markets.

RTOs can provide these benefits while taking account of state and regional preferences and circumstances. RTOs do not require a one-size-fits-all approach and can be custom-designed.

The Commission has recognized the need to be flexible in how these organizations are established, in order to accommodate local concerns. For example, in considering RTO policy, the Commission has solicited state views extensively, including by holding eleven hearings -- nine of which were outside Washington. The Commission also intends to provide additional opportunities for consultation.

The Commission is poised to act on RTOs generically. A generic instruction from the Congress would dispel uncertainties about the Commission's authority to order establishment of, and participation in, RTOs to promote efficient operation of bulk power markets. I feel confident that the Commission will preserve the ability of utilities joining an RTO to take into account the regional needs in various parts of the country, as well as flexibility to select the organizational format that will serve the region best. In my view, the Administration's proposed legislation addresses these concerns appropriately. A clear directive would enable the Commission to proceed to develop efficient, reliable regional power markets, which will significantly lower the cost of power to consumers, without the likelihood of court challenges.

Reliability

Let me turn next to reliability. In the past, regulators and industry participants relied upon voluntary industry organizations to establish reliability standards and practices. The regional reliability councils and the North American Electric Reliability Council (NERC) were composed primarily of the transmission-owning public utilities. These companies could and did rely upon voluntary cooperation and peer pressure for compliance. The approach worked well before the advent of competition and the Nation's electricity system became the envy of the world.

Competition in power markets increased concern that reliability rules could not be set or enforced in the same manner. Power markets today have extraordinary numbers of participants and numbers of transactions. The Secretary of Energy's Task Force on Electric System Reliability reexamined the consequences of these developments in detail. In brief, new and expanding demands for service on the system change operating conditions and the increasing number of sellers make it harder to stay competitive in many instances. Faced with competitive pressure, some participants may be prompted to cut corners on reliability.

The importance of reliability in America's supply of electricity has never been greater, however. The Secretary's Reliability Task Force recently observed that, as our economy becomes more dependent on computers and other electronic tools, power disruptions pose an ever-greater threat to productivity and even health and safety. The Task Force also found that ISOs are significant institutions for ensuring electric system reliability, and that bulk power systems can and should be operated more reliably and efficiently when coordinated over large geographic areas. Many observers, including NERC and the industry itself, have concluded that a mandatory system for reliability is needed to ensure that competition does not compromise the dependability of our Nation's electricity supply.

With the possibility of noncompliance with voluntary standards, and the current lack of clear authority for anyone to mandate compliance with reliability rules, industry participants have initiated several proceedings at the Commission to address specific reliability issues. In several cases, the industry has asked the Commission to adopt stopgap measures and to decide the lawfulness of new reliability measures under Federal Power Act standards ordinarily used to review rates and commercial practices. However, a Commission finding that reliability measures meet these Federal Power Act standards does not ensure

that the measures are themselves sufficient to maintain system reliability.

In 1998, for example, NERC initiated a proceeding seeking Commission review of NERC's new procedures for reducing power flows to prevent overloads on transmission lines, so-called transmission loading relief (TLR). The Commission concluded that these procedures affected the terms and conditions of transmission service provided by public utilities because they determined which commercial transactions would be curtailed to prevent overloads. The Commission required these procedures to be filed and told the affected utilities to take additional steps to ensure that the procedures were non-discriminatory.

Similarly, another Commission proceeding was filed by industry participants to address NERC's "tagging" requirements. NERC's rules required transmission users to provide transmission operators with a variety of information about their transactions, such as the source of the power being transmitted, so that transmission operators could take quick, appropriate action when necessary for reliability purposes. In that case, the collection of information, by itself, did not change the terms and conditions of open access service provided by public utilities and, thus, did not need to be filed. However, the Commission held that public utilities still had to provide service according

to the terms and conditions in their open access tariffs, unless and until they sought and were granted permission to apply different terms and conditions of service.

Finally, the Commission this month accepted on an experimental basis the beginnings of an entire set of regional reliability standards, proffered by industry participants. The Commission had previously never entertained such a request. This approach was proposed by the Western Systems Coordinating Council (WSCC), the regional reliability council covering the western United States. WSCC's proposal was contractual. Transmission providers could voluntarily sign contracts with the WSCC, agreeing to abide by the WSCC's reliability rules, and require generators connected to their transmission facilities to abide as well. Violations of the standards would result in penalties or other sanctions, subject to the Commission's review. Several reliability standards were filed with the Commission, which said it would defer to the WSCC's expertise, largely because of the representation enjoyed by diverse industry segments in the WSCC's processes. The Commission's limited role in this instance is to ensure the reasonableness of rates, terms and conditions of transmission service and to offer to mediate any disputes about possible violations.

Congress should make compliance with appropriate reliability standards mandatory. Despite the Commission's cautious acceptance of the WSCC's proposal, it recognizes that it is incapable of ensuring that reliability rules apply to all industry participants or that there is a widely-accepted process for adopting and enforcing reliability rules in this diverse power market. There appears to be an industry consensus that it can continue to work collaboratively to develop reliability standards, using a process in which all market sectors are fairly represented. Sufficient Federal oversight will then be needed to ensure that the standards maintain sufficient system reliability and are not unduly discriminatory or otherwise anticompetitive.

The broad support for both the WSCC filing and the reliability legislation proposed by NERC and included in the Administration's bill demonstrates the industry's recognition that federal reliability legislation and oversight will be important to the future integrity of electric service. It is nevertheless important to note that the Commission's role in a new reliability regime is largely reactive and does not impinge on the industry's ability to set its own standards and to apply them through a fair stakeholder process. By enforcing industry's agreements, the Commission can, however, prevent market participants from "free-riding" on the reliability efforts of others.

I would emphasize, in conclusion, that the states will also continue to play an important role in maintaining the reliability of electric service. Federal legislation should respect this role by striking an appropriate balance that permits states to continue their traditional activities in a manner consistent with the industry's mandatory reliability standards.

Transmission Siting

The construction of new transmission facilities, whether to serve local or regional needs, may represent an important means of obtaining the efficiency benefits of greater competition. As the Secretary's Reliability Task Force found, the reliability benefits of transmission enhancements can benefit many states, not just those where the facilities are sited. The grid is therefore being used increasingly for regional transactions. Even though the grid is being used increasingly for regional transactions, the siting of transmission and generation facilities is nevertheless subject to state law. In evaluating grid expansions, however, states may have difficulty balancing local impacts with regional benefits. State-by-state planning and the siting of transmission facilities that are used increasingly to support regional markets may be an obstacle to sensible grid development.

The answer is not to federally preempt this traditional state role. I believe instead that it would be beneficial to develop institutions that engage in regional planning and siting of transmission facilities, taking into account the interests of all affected market participants and states. This type of institution could adopt a broad perspective of decisionmaking on proposed transmission expansions and fairly balance the local impacts and regional benefits of such expansions, as well as the suitability of transmission versus generation development. While such regional entities would be novel, the benefits of regional transmission planning may justify such an effort. The Administration's legislation provides one vehicle for balancing these interests, either by authorizing interstate compacts to form regional transmission planning agencies or by convening joint federal-state meetings to consider transmission capacity additions. I also suggest that RTOs could perform a similar planning function, although this would only be advisory to state siting authorities under existing law.

Conclusion

Competition is growing in the electric industry, in response to the Energy Policy Act of 1992 and the Commission's efforts to remove barriers to competition and to let markets -- not

regulators -- determine the price of wholesale electric power. However, significant impediments to full competition remain.

As I stated before this Subcommittee in 1997, I believe that Federal legislation is needed to: establish a fair and effective program to protect bulk power reliability; bring all transmission in the lower 48 states within the Commission's open access transmission regime; and, clarify the Commission's authority to provide for regional management of the transmission grid through RTOs.

Aspects of the Administration's proposal and similar legislation addressing these issues have been criticized by some as expansions of Federal regulatory powers that are inconsistent with the themes of greater reliance on markets and lighter-handed regulation. I disagree. Consistent with the competitive goals of the Energy Policy Act of 1992, the Commission is aggressively promoting competition in wholesale markets. Competition in these markets offers the greatest potential consumer benefits because the cost of generation facilities is the largest part of the cost of electricity to ultimate consumers, far larger than the cost of transmission. Wholesale competition, however, cannot achieve its full potential without improved access to the interstate transmission grid and universal adherence to reliability rules. Thus, effective regulatory oversight of transmission and

reliability is a critical prerequisite to greater competition in wholesale power markets. The Commission's objective, in the final analysis, is to create market structures that will permit it to cede important economic decisionmaking to the marketplace and to substitute light-handed regulation and market monitoring for traditional command and control regulation.

Federal action to ensure reliability and promote effective regional market mechanisms in the near future -- whether from the Congress or the Commission -- will be needed to establish a fully competitive wholesale power market environment for the benefit of all electricity buyers, including residential consumers. Wholesale competition will lay the groundwork for retail competition, where adopted, and continue to ensure efficiency and fairness even where retail access is delayed. I continue to believe that one cannot, in this time of industry transition, be both a believer in competition and an agnostic about market structure.

Thank you again for the opportunity to offer my views here this morning. I would be pleased to answer any questions you may have.